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Hypoxic air machines

Commentary

T Tännsjö

To resort to hypoxic air machines—would that be to cheat? This clearly depends on whether such machines are prohibited or not. So the important question is this: Should sport authorities prohibit them or not?

One way of approaching this question may be to argue casuistically. Erythropoietin (EPO) is prohibited. Blood doping is prohibited. Training at high altitude is allowed. Does the hypoxic air machine bear more resemblance to training at high altitude than to the use of EPO? If that is the case it should not be prohibited. If, on the other hand, it bears more resemblance to the use of EPO, then it should be prohibited.

However, to argue casuistically is not entirely satisfactory. Even if, through such reasoning, we reach an answer, we do not obtain a principled *explanation* of the answer. We may get a hint at what to do (allow or prohibit), but not at *why* we should do so.[1] So the question need to be posed at a more principled level: If rules against doping in sport are to be adopted, with reference to what kind of notion of fair play or justice should they be defended?

It seems to be part of the ethos of sport that the winner of the genetic lottery, the person who, genetically speaking, is most fit, should also be the winner of the competition. This (Nietzschean) notion of justice or fairness is very different from, and even opposite to, the (more civilised) one we rely on in other contexts. In most other situations we claim that people should not be praised for their natural endowments, since they are not responsible for them. If a person is less talented, naturally, than another person, we should allow that he or she uses medical means to catch up with the more talented person. If this is not possible, the less talented person should be compensated, rather than punished, for their relative deficiency. This is not so in elitist sport. Here we want those who are naturally most talented to prevail.

On this notion of justice, even training was once looked upon with suspicion in sport. In particular, scientific full time training was conceived of as a way of giving an unfair advantage to those who resorted to it, such as the East German swimmers. Such methods allowed these swimmers to prevail over more talented competitors from other countries. However, it soon transpired that there was no way of containing training. The solution was to allow it, with the understanding that all who competed in elitist sport would resort to it. So no unfair advantage remained.

The situation with performance enhancing drugs, not to speak of genetic enhancement, is very different. Obviously, the use of performance enhancing drugs may mean that those who are genetically speaking less well equipped will catch up with those who are better equipped. And according to the existing ethos of sport, this is not fair.

A much publicised example of this is of the Finnish cross country skier Eero Mäntyranta. Throughout his career in the 1960s Mäntyranta was suspected of blood doping because his red blood count was 20% higher than that of other athletes. Thirty years later, scientists tested 200 members of his family and discovered that 50 of them, including Mäntyranta himself, were born with a rare genetic mutation that causes an increase in oxygen-rich red blood cells. This mutation made Mäntyranta almost invincible in the heyday of his career. Today his less generously genetically endowed competitors could, in order to catch up with him, resort to EPO. Many people would think that this was being unfair. This kind of sentiment may explain why the resistance to doping is more recalcitrant than the opposition ever was to training, or even to systematic training.

If this rough sketch of the ethos of sport is correct, what are we to say, with reference to it, about the hypoxic air machine? To the extent that the use of the machine does not level out genetic, inborn differences between competitors, there is no reason to prohibit it. To the extent that it can be used even by Mäntyranta, to increase his capacity for oxygen intake even more, it poses no problem to the ethos of sport. We may treat it as training—training at high altitude or the use of altitude tents.

However, what if it had been different? What if the hypoxic air machine was a means to level out natural, inborn differences? Well, then we would have had to face a choice: to ban the machine or change the ethos of sport.

This is not the place to go deep into this discussion. Allow me only, since this is a question we have to face anyway, to indicate my favoured choice. My suggestion is that, rather than sticking to the existing ethos of sport, we should change it. Even in sport we should allow that people level out their inborn differences. We should allow all sorts of (safe) medical and genetic methods of enhancement of athletes. This would pave the way for more exciting competitions and for the possibility that anyone who wants to do so can take part in them on equal terms. And at last we would come to grips with the problem of elitism in sport.[2]

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